

Cape Hatteras National Seashore Seabeach Amaranth Surveys

2006 Annual Report

Seabeach amaranth, *Amaranthus pumilus*, was listed as federally threatened in 1993. At the time of its listing the species had been eliminated from two-thirds of its historic range that extended from Massachusetts to South Carolina (USFWS). The annual plant is found on overwash flats at accreting ends of barrier islands and along lower foredunes. Populations can be highly variable, occupying suitable habitat as it becomes available (USFWS). Plants have only been found in vehicle-free areas, often the same areas protected for nesting birds. Amaranth plants have been known to survive into December at CAHA. Dormant seeds may remain viable for several years.

Seabeach amaranth populations have fluctuated greatly since surveys began in 1985 (Table 1, Maps 1-4). In the last 10 years, numbers were the highest in 2002 with 93 plants. In recent years only one plant could be found in 2004 and two plants were found in 2005. No plants were found in 2006.

In 2006 a total of 27 recorded survey hours were spent in the months of August and September surveying, on foot, specifically for seabeach amaranth. More hours were actually spent in the field than recorded, as other field work required staff to be in the historical and potential sites during which time no additional plants were observed. All historical sites and potential habitat at Cape Hatteras National Seashore was surveyed. Approximately 6 linear miles of shoreline were covered in the surveys. This is the first growing season on record since 1994 that no plants were located.

Table 1. General distribution of Seabeach Amaranth (<i>Amaranthus pumilus</i>) at Cape Hatteras National Seashore.					
Year	Bodie Island Spit	Cape Pt./ South Beach	Hatteras Island Spit	Ocracoke Island	Total
1985	0	300-500	300-500	100	700-1,100
1986	0	>200	>300	>100	>600
1987	0	5,200	274	1,409	6,883
1988	0	800	1,718	13,310	15,828
1990	0	2,830	252	250	3,332
1994			0	0	0
1996	0	6	82	10	98
1997	0	59	16	6	81
1998	0	55	210	0	265
1999	0	3	5	0	8
2000	0	1	1	0	2
2001	0	27	16	8	51
2002	0	11	75	7	93
2003	0	16	3	11	30
2004	1	0	0	0	1
2005	1	0	0	1	2
2006	0	0	0	0	0

Population estimates by NC Natural Heritage Program, East Carolina University and NPS